

AP2S1 Antibody

Rabbit mAb Catalog # AP92166

Product Information

Application WB, FC, IP **Primary Accession** P53680

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names AP17; AP17 delta; Ap2s1; CLAPS2; Sigma2 adaptin;

IsotypeRabbit IgGHostRabbitCalculated MW17018

Additional Information

Dilution WB 1:500~1:2000 IP 1:50 FC 1:50

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human AP2S1

Description Component of the adaptor protein complex 2 (AP-2). Adaptor protein

complexes function in protein Transport via Transport vesicles in different membrane traffic pathways. Adaptor protein complexes are vesicle coat components and appear to be involved in cargo selection and vesicle

formation.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name AP2S1 (<u>HGNC:565</u>)

Synonyms AP17, CLAPS2

Function Component of the adaptor protein complex 2 (AP-2). Adaptor protein

complexes function in protein transport via transport vesicles in different membrane traffic pathways. Adaptor protein complexes are vesicle coat components and appear to be involved in cargo selection and vesicle

formation. AP-2 is involved in clathrin-dependent endocytosis in which cargo

proteins are incorporated into vesicles surrounded by clathrin

(clathrin-coated vesicles, CCVs) which are destined for fusion with the early endosome. The clathrin lattice serves as a mechanical scaffold but is itself unable to bind directly to membrane components. Clathrin-associated adaptor protein (AP) complexes which can bind directly to both the clathrin lattice and to the lipid and protein components of membranes are considered to be the major clathrin adaptors contributing the CCV formation. AP-2 also

serves as a cargo receptor to selectively sort the membrane proteins involved in receptor-mediated endocytosis. AP-2 seems to play a role in the recycling of synaptic vesicle membranes from the presynaptic surface. AP-2 recognizes Y-X-X-[FILMV] (Y-X-X-Phi) and [ED]-X-X-X-L- [LI] endocytosis signal motifs within the cytosolic tails of transmembrane cargo molecules. AP-2 may also play a role in maintaining normal post-endocytic trafficking through the ARF6-regulated, non- clathrin pathway. The AP-2 alpha and AP-2 sigma subunits are thought to contribute to the recognition of the [ED]-X-X-X-L-[LI] motif (By similarity). May also play a role in extracellular calcium homeostasis.

Cellular Location

Cell membrane {ECO:0000250 | UniProtKB:P63010}. Membrane, coated pit; Peripheral membrane protein; Cytoplasmic side. Note=AP-2 appears to be excluded from internalizing CCVs and to disengage from sites of endocytosis seconds before internalization of the nascent CCV {ECO:0000250 | UniProtKB:P63010}

Images



Western blot analysis of AP2S1 expression in HeLa cell lysate.

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